LIGHT QUANTITY DETECTOR

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Abstract of **JP10038683**

PROBLEM TO BE SOLVED: To detect the quantity of light with high accuracy by amplifying the signal of each split photodiode in an amplifying section having variable amplification factors and adding the amplified signals to each other.

SOLUTION: An amplifying section having variable amplification factors is constituted of OP amplifiers 8 and variable resistors 9 and amplifies the signals of split photodiodes 4. The photodiodes 4 are moved to a point below a ray of light having a fixed light quantity and the outputs of the photodiodes 4 are detected while the ray of light is successively made incident to the photodiodes 4, and then, the values of the variable resistor 9 are adjusted so that the outputs of the photodiodes 4 can become equal to each other. Then the output signals of the photodiodes 4 irradiated with the ray of light are subjected to current-voltage conversion at the amplifiers 8 and inputted to the resistors 9. Since the resistors 9 are set at prescribed values, the output signals of the resistors 9 are corrected for the sensitivity fluctuation among the photodiodes 4. An OP amplifier 10 detects the light quantity of the ray of light as a whole by adding the output signals of the photodiodes 4 to each other. Therefore, the light quantity can be detected with high accuracy by suppressing the sensitivity fluctuation among the photodiodes 4.